Problem statement-1

```
swaroopvmphasis@ip-172-31-82-53:~$ docker version
Client: Docker Engine - Community
 Version:           19.03.11
 API version:       1.40
 Go version:        go1.13.10
 Git commit:        42e35e61f3
 Built:             Mon Jun  1 09:12:41 2020
 OS/Arch:           linux/amd64
 Experimental:      false
Got permission denied while trying to connect to the Docker daemon soc
```
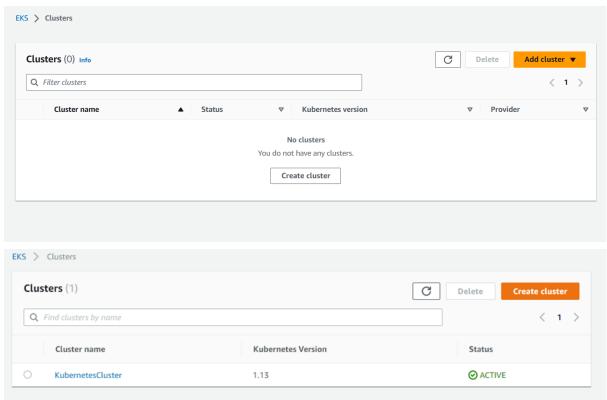
```
swaroopvmphasis@ip-172-31-82-53:~$ kubeadm init
I0728 05:37:26.054868   17475 version.go:252] remote version is much newer: v1.27.4; falling back to: stable-1.18
W0728 05:37:26.188417   17475 configset.go:202] WARNING: kubeadm cannot validate component configs for API groups [kubelet.config.k8s.io kubeproxy.conf
ig.k8s.io]
[init] Using Kubernetes version: v1.18.20
[preflight] Running pre-flight checks
error execution phase preflight: [preflight] Some fatal errors occurred:
        [ERROR IsPrivilegedUser]: user is not running as root
[preflight] If you know what you are doing, you can make a check non-fatal with `--ignore-preflight-errors=...`
To see the stack trace of this error execute with --v=5 or higher
swaroopvmphasis@ip-172-31-82-53:~$ mkdir -p $HOME/.kube
swaroopvmphasis@ip-172-31-82-53:~$ sudo cp -i /etc/kubernetes/admin.conf $HOME/.kube/config
cp: cannot stat '/etc/kubernetes/admin.conf': No such file or directory
swaroopvmphasis@ip-172-31-82-53:~$ sudo chown $(id -u):$(id -g) $HOME/.kube/config
chown: cannot access '/home/swaroopvmphasis/.kube/config': No such file or directory
swaroopvmphasis@ip-172-31-82-53:~$ export kubever=$(kubectl version | base64 | tr -d '\n')
Error from server (NotFound): the server could not find the requested resource
swaroopvmphasis@ip-172-31-82-53:~$ kubectl apply -f "https://cloud.weave.works/k8s/net?k8s-version=$kubever"
Error from server (NotFound): the server could not find the requested resource
swaroopvmphasis@ip-172-31-82-53:~$ kubectl get node
error: the server doesn't have a resource type "node"
swaroopvmphasis@ip-172-31-82-53:~$ kubectl get pods --all-namespaces
error: the server doesn't have a resource type "pods"
swaroopvmphasis@ip-172-31-82-53:~$ export kubever=$(kubectl version | base64 | tr -d '\n')
Error from server (NotFound): the server could not find the requested resource
swaroopvmphasis@ip-172-31-82-53:~$ kunectl version
kunectl: command not found
swaroopvmphasis@ip-172-31-82-53:~$ kubectl version
Client Version: version.Info{Major:"1", Minor:"18", GitVersion:"v1.18.3", GitCommit:"2e7996e3e2712684bc73f0dec0200d64eec7fe40", GitTreeState:"clean", B
uildDate:"2020-05-20T12:52:00Z", GoVersion:"go1.13.9", Compiler:"gc", Platform:"linux/amd64"}
Error from server (NotFound): the server could not find the requested resource
swaroopvmphasis@ip-172-31-82-53:~$
```

Problem statement-2

EKS > Clusters

Clusters (0) Info

Cluster name ▲	Status ▽	Kubernetes version ▽	Provider ▽

No clusters
You do not have any clusters.

Create cluster

EKS > Clusters

Clusters (1)

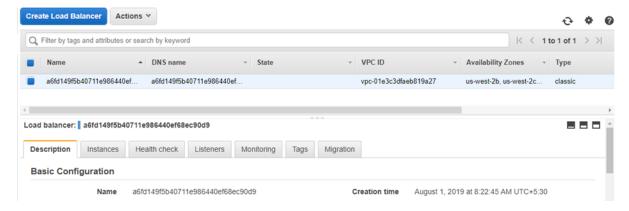| Cluster name	Kubernetes Version	Status
○ KubernetesCluster	1.13	⊘ ACTIVE

```
root@ip-172-31-17-73:~# aws configure
AWS Access Key ID [None]: AKIAVORWYFFGE3YTFZFZ
AWS Secret Access Key [None]: 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
Default region name [None]: us-east-1
Default output format [None]: json
root@ip-172-31-17-73:~#
```

```
root@ip-172-31-17-73:~# aws eks --region us-east-1 update-kubeconfig --name KubernetesCluster
Updated context arn:aws:eks:us-east-1:374850726220:cluster/KubernetesCluster in /root/.kube/config
root@ip-172-31-17-73:~# kubectl get svc
NAME         TYPE        CLUSTER-IP    EXTERNAL-IP   PORT(S)    AGE
kubernetes   ClusterIP   10.100.0.1    <none>        443/TCP    32m
root@ip-172-31-17-73:~#
```

Problem statement-3

```
root@ip-172-31-86-69:~# git clone https://github.com/Anuj1990/SpringBootDocker.git
Cloning into 'SpringBootDocker'...
remote: Enumerating objects: 52, done.
remote: Counting objects: 100% (52/52), done.
remote: Compressing objects: 100% (31/31), done.
remote: Total 52 (delta 4), reused 52 (delta 4), pack-reused 0
Unpacking objects: 100% (52/52), done.
root@ip-172-31-86-69:~# cd SpringBootDocker/
root@ip-172-31-86-69:~/SpringBootDocker# ls -alrt
total 24
drwx------ 7 root root 4096 Jul 25 02:33 ..
drwxr-xr-x 4 root root 4096 Jul 25 02:33 src
-rw-r--r-- 1 root root 2601 Jul 25 02:33 pom.xml
-rw-r--r-- 1 root root  207 Jul 25 02:33 Dockerfile
drwxr-xr-x 8 root root 4096 Jul 25 02:33 .git
drwxr-xr-x 4 root root 4096 Jul 25 02:33 .
root@ip-172-31-86-69:~/SpringBootDocker#
```

	Name	DNS name	State	VPC ID	Availability Zones	Type
☑	a6fd149f5b40711e986440ef...	a6fd149f5b40711e986440ef...		vpc-01e3c3dfaeb819a27	us-west-2b, us-west-2c...	classic

Create Load Balancer | Actions ⌄

Filter by tags and attributes or search by keyword | 1 to 1 of 1

Load balancer: a6fd149f5b40711e986440ef68ec90d9

Description | Instances | Health check | Listeners | Monitoring | Tags | Migration

Basic Configuration

Name   a6fd149f5b40711e986440ef68ec90d9   **Creation time**   August 1, 2019 at 8:22:45 AM UTC+5:30

Problem statement-4

Clusters (2)

Search: EKS

Cluster name	Kubernetes Version	Status
EKSCluster	1.13	⊘ ACTIVE

```
root@ip-172-31-86-69:~# kubectl run kubernetes-bootcamp --image=docker.io/jocatalin/kubernetes-bootcamp:v1 --port=8080
deployment.apps "kubernetes-bootcamp" created
root@ip-172-31-86-69:~# kubectl expose deployment/kubernetes-bootcamp --port=8080 --target-port=8080 --type=NodePort
service "kubernetes-bootcamp" exposed
root@ip-172-31-86-69:~# kubectl get pods
NAME                                   READY     STATUS             RESTARTS   AGE
kubernetes-bootcamp-6c5cfd894b-9jqzf   0/1       ContainerCreating  0          6s
root@ip-172-31-86-69:~# kubectl get deployments
NAME                  DESIRED   CURRENT   UP-TO-DATE   AVAILABLE   AGE
kubernetes-bootcamp   1         1         1            1           15s
root@ip-172-31-86-69:~# kubectl get pods
NAME                                   READY     STATUS    RESTARTS   AGE
kubernetes-bootcamp-6c5cfd894b-9jqzf   1/1       Running   0          19s
root@ip-172-31-86-69:~# kubectl get services
NAME                  TYPE        CLUSTER-IP      EXTERNAL-IP   PORT(S)          AGE
kubernetes            ClusterIP   10.100.0.1      <none>        443/TCP          44m
kubernetes-bootcamp   NodePort    10.100.33.238   <none>        8080:30306/TCP   1m
root@ip-172-31-86-69:~#
```